

Current Patents Available for Licensing

Propulsion (Aeronautics and Space)

Patent Number	Case Number	Patent Expires	Title
5,082,293	LEW-15085-1	11/09/2010	High Temperature, Flexible, Fiber Seals
5,330,590	LEW-15697-1	05/26/2013	High Temperature Creep and Oxidation Resistant Chromium Silicide Matrix Alloy Containing Molybdenum
5,496,644	LEW-15561-2	12/20/2013	Plasma Sprayed Mullite Coatings On Silicon-Base Ceramics
5,866,518	LEW-16183-1	01/16/2017	PS300 – Self Lubricating Readily Polished High Temperature Composite
5,978,500	LEW-16345-1	08/27/2017	High Speed Gear Failure Digital Video Imaging System
6,007,068	LEW-15870-1	11/25/2016	Low to High Temperature Dynamic Face Seal
6,037,499	LEW-16384-2	01/23/2018	Polyimides Based on 4,4'-Bis (4-Aminophenoxy-/substituted Biphenyl)
6,069,278	LEW-16384-3	01/23/2018	Aromatic Diamines and Polyimides
6,039,325	LEW-16231-2	10/27/2016	Resilient Braided Rope Seal
6,064,156	LEW-16056-1	09/14/2018	Design and Manufacturing Processes For Long-Life Hollow Cathode Assemblies
6,240,932	LEW-16056-2	09/14/2018	Processes for Cleaning a Cathode Tube and Subassemblies in a Hollow Cathode Assembly Design and Manufacture of Long Life Hollow Cathode Assemblies
6,380,685	LEW-16056-3	09/14/2018	Procedure for Making a Hollow Cathode Assembly
6,539,818	LEW-16056-4	09/14/2018	Design and Manufacture of Long Life Hollow Cathode Assemblies
6,676,288	LEW-16056-5	09/14/2018	Design and Manufacturing Processes Of Long-Life Hollow Cathode Assemblies
6,729,174	LEW-16056-6	09/14/2018	Design and Manufacturing Processes Of Long-Life Hollow Cathode Assemblies

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6,829,920	LEW-16056-7	09/14/2018	Design and Manufacturing Processes Of Long-Life Hollow Cathode Assemblies
6,093,454	LEW-16390-2	10/29/2017	Controlled Thermal Expansion Coat For Thermal Barrier Coatings
6,103,864	LEW-16691-1	01/14/2019	PMR Extended Shelf Life Technology – A Chemical Process to Significantly Retard the Premature Aging of PMR Resin Solutions and PMR Prepregs
6,151,897	LEW-16685-1	04/06/2019	Actuator Control Using Shape Memory Alloys, Microsystems and Optically Controlled Switches
6,367,250	LEW-16685-2	04/06/2019	Actuator control Using Shape Memory Alloys, Microsystems and Optically Controlled Switches
6,200,094	LEW-16644-1	06/18/2019	Wave Augmented Diffuser for Centrifugal Compressors
6,262,223	LEW-16968-1	02/01/2020	Development of Processable Polyimides for High Temperature Application with the Use of Triamine Additives
6,272,846	LEW-16636-1	04/14/2019	Non-Toxic, Dual-Mode Satellite Fuel
6,378,291	LEW-16636-2	04/14/2019	Reduced Toxicity Fuel Satellite Propulsion System Including Catalytic Decomposing Element With Hydrogen Peroxide
6,314,718	LEW-16636-3	04/14/2019	Reduced Toxicity Fuel Satellite Propulsion System Including Catalytic Decomposing Element
6,546,714	LEW-16636-4	04/14/2019	Reduced Toxicity Fuel Satellite Propulsion System Including Plasmatron
6,311,477	LEW-16636-5	04/14/2019	Reduced Toxicity Fuel Satellite Propulsion System Including Axial Thruster and ACS Thruster Combination

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6,274,699	LEW-17012-1	03/23/2020	Cyclohexene Endcaps for Polymers With Improved Thermal Oxidative Stability
6,303,744	LEW-16987-1	03/23/2020	New Latent Reactive Endcaps for Polymers with Improved Thermal Oxidative Stability
6,316,078	LEW-16803-1	03/14/2020	Segmented Thermal Barrier Coating
6,393,831	LEW-16790-1	11/17/2020	Exoskeletal Engine
6,446,979	LEW-16684-1	06/27/2020	Thermal Barrier Braided Rope Seal
6,470,672	LEW-17017-1	07/16/2021	Minimally Intrusive Supersonic Injectors for Augmented Rocket And RBCC/Scramjet Propulsion Systems
6,593,389	LEW-17133-1	04/05/2021	High Performance Polymers from The Diels-Alder Trapping of Photochemically Generated Intermediates
6,486,230	LEW-17133-2	04/05/2021	Polyesters by Photochemical Cyclopolymerization
6,513,730	LEW-17110-1	03/21/2021	MEMS-Based Spinning Nozzle With Pre-Mix Chamber
6,770,208	LEW-17110-2	08/13/2022	Method for Forming MEMS-Based Spinning Nozzle
6,660,110	LEW-17206-1	04/08/2022	Economical Dual Microstructure Heat Treatment Apparatus/Process
6,667,725	LEW-17167-1	07/11/2022	Radio Frequency (RF) Telemetry System for Sensors and Actuators
6,696,774	LEW-16998-1	06/01/2021	Magnetohydrodynamic Power Extraction and Flow Conditioning In a Gas Turbine Inlet
6,696,792	LEW-17230-1	08/08/2022	Compact Plasma Accelerator for Micro-Propulsion and Low Energy Materials Processing
6,960,888	LEW-17230-2	01/05/2024	Compact Plasma Accelerator
6,702,300	LEW-17112-1	01/11/2022	Seal for Large Structural Movements
6,784,276	LEW-17291-1	07/25/2022	Improved Processing for Polyimides Via Concentrated Solid Monomer Reactants Approach

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6,838,191	LEW-17357-1	05/20/2023	Blanch Resistant and Thermal Barrier NiAl Coating Systems for Advanced Copper Alloys
6,886,327	LEW-17093-2	03/20/2022	NiAl-Based Approach for Rocket Combustion Chambers
6,974,805	LEW-17318-1	10/29/2022	Nickel-Base Superalloy Turbine Disk
7,015,304	LEW-17618-1	07/23/2024	Solvent-Free Low Melt Viscosity Imide Oligomers and Thermosetting Polyimide Composites – High Tg Polyimides for Resin Transfer Molding (RTM)
7,074,006	LEW-17176-1	10/08/2022	A Self Recirculating Endwall Suction and ReInjection Method For Fan/Compressor Stabilization And Efficiency Improvement – Endwall Treatment and Method For Gas Turbines
7,086,648	LEW-17182-1	08/22/2023	Acoustic Seal
5,014,917	LEW-14672-1	11/27/2009	Dynamic, High Temperature Flexible Seal
5,803,410	LEW-15920-1	12/01/2015	A Novel Idea for Reducing Skin Friction
5,715,047	LEW-16041-1	07/08/2016	Normal Shock Position Sensors
6,811,154	LEW-17129-1	02/09/2023	Improved Non-Contacting Finger Seal
7,326,027	LEW-17517-1	05/25/2024	Flow-Field Control-Rods to Stabilize Flow in a Centrifugal Compressor
7,261,783	LEW-17672-1	09/22/2024	Low Density High Creep Resistant Single Crystal Superalloy for Turbine Airfoils
5,776,617	LEW-20006-1	10/21/2016	Oxidation Resistant Ti-Al-Fe Diffusion Barrier for FeCrAlY Coatings on Titanium Aluminides